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Before the

Federal Communications Commission

Washington D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

The Secretary
Federal Communications Commission
1919 M. Street N.W.
Room 222
Washington D.C. 20544

97-197

Re: Comments to Notice Of Proposed Rulemaking in **WT Docket No. 97-197** as given in **FCC 97-303**
Enclosed find original and 9 copies to allow distribution to Commissioners

Dear Mr. Secretary:

This letter includes comments to the Notice of Proposed Rulemaking in WT Docket No. 97-197 described in Public Notice FCC 97-303.

Please place these comments in the official record and distribute as indicated by the Commission.

Respectfully yours, Dated: October 8, 1997

David Fichtenberg

David Fichtenberg
Spokesperson for the Ad-Hoc Association of Parties Concerned About the Federal Communications Commission Radiofrequeny Health and Safety Rules et al.
P.O.Box 7577
Olympia, WA 98507-7577 Tel: (206) 722-8306

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Before the

FEDERAL COMMUNICATIONS COMMISSION

Washington, D.C. 20554

97-197

In the Matter of Notice of Proposed Rulemaking established to seek comment on proposed procedures for filing and reviewing requests filed pursuant to 47 U.S.C Section 332(c)(7)(B)(iv)-(v)	))))	WT Docket 97-197 described in FCC 97-303

The Secretary
FEDERAL COMMUNICATIONS COMMISSION
1919 M Street N.W. Room 222
Washington, D.C. 20554

To: The Commission

Comments to Notice of Proposed Rulemaking in WT Docket 97-197

Submitted by

David Fichtenberg
Spokesperson for the Ad-Hoc Association of Parties Concerned About the Federal Communications Commission Radiofrequency Health and Safety Rules et al.
P.O.Box 7577
Olympia, WA 98507-7577 Tel: (206) 722-8306

Dated: October 8, 1997

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Summary

The Federal Communications Commission (Commission) has sought comments on a Notice of Proposed Rulemaking in WT Docket 97-197 to establish procedures for filing and reviewing requests filed pursuant to 47 U.S.C Section 332(c)(7)(B)(iv)-(v). These procedures must take into account the following points.

Part 1: Worker health and safety issues

1. It is under the jurisdiction of courts of competent juridiction and not the Commission to settle disputes arising over state or local jurisdiction regulations to determine if Commission licensee's are complying with Commission radiofrequency (RF) exposure guidelines, e.g. as given in 47 CFR section 1.1310 and section 2.1093, which pertain to power density and specific absorption rate limits respectively. This is the view of the Commission's Local and State Goverment Advisory Committee in its Recommendation #5 of June 27, 1997. This finding that the Commission should refrain from further attempts to preempt state and local regulations is also supported by a resolution of the 65th Annual Conference of Mayors in San Francisco, California June 20-24, 1997 where it resoleved that it *"Opposes the actions of the FCC which are designed to limit, remove, or in any way alter the authority of local governments to make decisions regarding the placement, construction, and modification of personal wireless service facilities, including monopoles and towers.*

2. Information pertaining to the health and safety impacts of RF emissions from any existing or proposed Commission licensed facility are relevant to actions that states and local jurisdictions may need to take to *"protect the public safety and welfare"* as provided for in 47 U.S.C. section 253(b). These actions are not only limited to approving a permit or zoning for a personal wireless service facility, but also pertain to building code matters relating to attenuating signals, informing persons of potential exposure dangers, given that the Environmental Protection Agency has reported biological effects with potentially adverse outcomes below the hazard threshold of the Commission [for example, see the EPA report, Biological Effects of Radiofrequency Radiation, EPA-600/8-83-026F, September, 1984]. Also note, the Food and Drug Administration (FDA)

warned the Commission that its guidelines *"do not address the indirect, but potentially harmful effects of electromagnetic interference with medical devices. These effects can induce failures in medical devices that can cause injury or death."* [FDA to FCC letter of July 17, 1996, ET Docket 93-62]. Therefore, in order to help prevent injury or death due to the Commission's allowed exposure levels, it is necessary for states and local jurisdictions to meet their responsibilities by assessing the nature and extent of RF exposure and then to inform those potentially at risk to injury or death so appropriate precautions can be taken. Thus, independent of approval of a permit, at hearings and zoning meetings presentation of health and safety issues is relevant and necessary for being informed of potential hazards which a given land use request may cause and planning appropriate mitigation actions. This applies to both public places and exposure in the workplace. To prevent such presentation of information would also violate constitutional guarantees of freedom of speech and due process.

3. Worker RF health and safety program elements to mitigate any increase in potential risk due to higher exposure are among the factors which states and local juridictions can measure to evaluate compliance with Commission rules that permit higher exposure levels to workers than to the public.

4. Courts of competent jurisdiction may rule on whether a party to a dispute inappropriately sought relief from the Commission under 47 U.S.C. 332(c)(7)(B)(iv)-(v). This ruling can be made when a state or local jurisdiction receives notice from the Commission of complaint of such a party, and may then apply to a court of competent jurisdiction to rule that it has jurisdiction. Commission rules should provide that when such a determination is made by a court of competent jurisdiction that the Commission will allow the dispute to proceed through the courts.

5. State and local jurisdiction decision based upon public opinion and public fears about potential adverse health and safety effects from RF exposure do not qualify as being made "on the basis of the environmental effects of radio frequency emissions" since such fears may exist without any actual environmental effects occuring. The Congressional statute is referring to state and local regualtion that is based on the assertion of the existence of certain environmental effects, direct or indirect, and that the regulation is based upon such asserted actual effects.

6. A use of land, even near that of another party which causes that party a legitimate and reasonable "fear of injury" has been found by the courts to be a "taking" and requiring compensation under the 5th amendment. Thus, evidence of a possible unconstitional action must be allowed in proceedings.

7. The Commssion cannot preempt any state or local jurisdiction regulation this is based upon justifications other than those upon which the Commission may preempt. Rather, the Commission should only rule on whether a justification should be set aside, and then a court of competent jurisdiction could decide a matter on the remaining evidence. Shoud the Commission preempt a regulation, a court of competent jurisdiction could re-instate it as long as it showed that the justification was outside the scope of the matters the Commission could review.

8. The Commission must make its decisions based only upon justifications given, and may not speculate on how much of the evidence in the record affected the decison. To do otherwise would be an unconstitutional act violating due process and the 10th amendment, as it is the right of states to determine the justification for their judicial decisions.

9. The Commission may not preempt agreements made by private entities, but only by governments and their instrumentalities, which exclude private entities - any forceful 'taking' would be protected by the 'due process' provisions of the 5th amendment.

10. There should be no policy of "Rebuttable Presumption" and the Commission needs to change its general policy on this matter. First there is a history of Commission licensees not following the law and mispresenting to government bodies, as was determinded by the California Public Utilities Commission which issued fines of over $4 million for such illegal actions. Second, the Commission's rules for excluding an evaluation are inadequate and may allow out-of-compliance conditions due to (i) tall buildings near high transmitters, and due to (ii) multiple tranmitters each owned by different operators and where each transmitter is 'under the limit' for requiring an evaluation.. Furthermore, the record indicates operators themselves will not be able to identify sources of multiple transmitters. In this regard the Commission must establish a means whereby any party can find a listing of the location of all individual Commission licensed transmitters. Furthermore, and in any case, the Commission must establish an inspection program, like many

other regulatory federal agencies so it can evaluate to what extent its assumption of compliance is correct. Furthermore, requiring proof of non-compliance is too difficult a requirement for merely having the Commission decide to ask for evidence of compliance. Complaints sufficient to justify Commission review need only indicate a concern that limits may be exceeded.

12. An 'interested party' is any party asked to participate by those living or working near a site or who are faced with similar concerns as at a disputed site, and as such are legitimate intervenors.

13. The Commission erred in believing it can preempt operations - therefore actions to regulate operations may not be preempted, including collecting information.

14. The Commission does not have authority to preempt health and safety regulations, as Congress never designated it to have such authority. Thus review of state and local jurisdiction regulations pertaining to health and safety may not be preempted by the Commision, but are subject to review by the Courts of competent jursidiction.

15. "Environmental effects" on which the Commision can preempt are those for which its guidelines provide protection. It is contrary to the due process provisions of the constitution to preempt regulations pertaining to effects for which the Commission's limits are known not to provide protection, e.g. medical device failures from RF interference.

Before the

FEDERAL COMMUNICATIONS COMMISSION

Washington, D.C. 20554

In the matter of testing and documentation requirements releated to the environemental effects of radio frequency emissions	)))	WT Docket No. 97-197

The Secretary
FEDERAL COMMUNICATIONS COMMISSION
1919 M Street N.W. Room 222
Washington, D.C. 20554

To: The Commission

COMMENTS
On Notice of Proposed Rulemaking in WT Docket No. 97-197
as described in FCC 97-303 released August 25, 1997

The Federal Communications Commission ("the Commission') has stated in its Notice Of Proposed Rulemaking in WT Docket No. 97-197 (NPRM), included in the Commission notice FCC 97-303, that,

"we seek comment on proposed procedures for filing and reviewing requests filed pursuant to Section 332(c)(7)(B)(iv)-(v) of the Communications Act for relief from state or local regulations on the placement, construction, or modification of personal wireless service facilities based directly or indirectly on the environmental effects of RF emissions." [NPRM, para. #117]

In accordance with the Commission's NPRM, the Ad-Hoc Association of Parties Concerned About the Federal Communications Commission Radiofrequency Health and Safety Rules ("Ad-Hoc Association") respectfully appreciates this opportunity to submit these COMMENTS.

A. Introduction:

1. The Ad-Hoc Association has been a participant in the rulemaking proceeding ET Docket 93-62 and has submitted a Petition for Reconsideration of the Commission's Rule and Order 96-326, and to which the Commission has recently responded in its Second Memorandum of Opinion and Order FCC 97-303. In its Petition for Reconsideration the Ad-Hoc Association specifically

requested the Commission to acknowledge the authority of local jurisdictions to require measurements related to a variety of RF health and RF safety considerations [Ad-Hoc 96-326 Petition at pages 7-9,13-14, 16-18], and appreciates the opportunity of commenting further on this matter.

B. Jurisdiction to Regulate Compliance

B.1 Comments of the FCC Local and State Government Advisory Committee

B.1.1 The FCC Local and State Government Advisory Committee ("LSGAC") correctly states that the Commission does not have authority to preempt state and local jurisdiction regulations providing for Commission licensees to demonstrate compliance with the Commission's regulations concerning RF exposure limits, and states,

"Section 332(c) of the Communications Act provides that state and local governments may not regulate the placement, construction and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the Commission's regulations concerning such emissions. The Telecommunications Act thus preserves the authority of state and local governments to ensure that personal wireless service facilities comply with the Commission's RF emission regulations." [LSGAC Advisory Recommendation #5, June 27, 1997]

B.1.2 Moreover, the Commission itself notes,

"Neither the text of the Act nor the legislative history indicates to what extent localities are permitted to request that personal wireless providers demonstrate compliance with our guidelines." [the Notice, #142]

B.1.3 Since both the Commission and LSGAC agree that 47 U.S.C 332(c)(7) ("Paragraph 7") does not address any limitations on the extent localities are permitted to requrest that personal wireless providers demonstrate compliance with the Commission's guidelines given in 47 CFR Section 1.1310 and 47 CFR section 2.1093, it follows that this is a field not restricted by Paragraph 7 (B)(iv)-(v), and that state and local regulations to determine compliance should be reviewed by the court of competent jurisidction should Commission licensees find there is cause to seek relief - as argued by LSGAC. Accordingly, since both the Commission and LSGAC agree that Paragraph 7 gives states and local jurisdiction to regulate to assure compliance, but does indicate any limit on such regulation - this leaves the field open, and the Commission may not

preempt such regulation under Paragraph 7, but rather leave the matter to a court of competent jurisdiction to settle disputes, which is what Congress intended when it prepared Paragraph 7..

B.1.4 The above finding is further supported by considering that LSGAC's arguments that

(i) the Commission does not have the field staff to properly monitor compliance, that

(ii) that states and local jurisdictions have an obligation and demand by their constituents to assure compliance is met, and

(iii) that facilities may in fact, operate out of compliance - especially with the emphasis of the Commission and local jurisdictions on co-location of transmitters.

B.2 Paragraph 7(iv) which limits state and local regulation of personal wireless service facilities provides that such limitation only applies when regulations are on the basis of the "environmental effects" of RF emissions. State and Local regulations to assure compliance with the Commission's limits in 47 CFR Sections 1.1310 and 2.1093 are not based upon any environmental effects other than those identified by the Commission, accordingly, Paragraph 7 provides that such regulations to be reviewed by the courts, not the Commission.

C. Commission procedures for reviewing worker RF health and safety program regulations

C.1. Concerning Commission procedures to be developed to review state and local jurisdiction worker RF health and safety program regulations, ***"affected persons"*** who can have standing at any Commission review of state or local jurisdiction worker RF health and safety program regulations, should include all employed or contract workers who in their judgment may give a bona fide health or safety reason, or other bona fide quality of life consideration included within the scope of the National Environmental Policy Act of 1969 [42 U.S.C. Section 4321, et seq.] for why they may be potentially adversely affected during their work concerning the placement, construction, modification, or operation or any personal wireless service facility or other Commission licensed facility. It also includes the 'designated representatives' of such workers as may be indicated in a written authorization, except that recognized or certified collective bargaining agents shall be treated automatically as a 'designated representative' without regard to written employee authorization [such as provided for in 29 CFR section 1910.1020(c)(3)].

Persons should not be excluded based upon whether they may not be exposed to RF exposure levels exceeding certain values, for this may well be one of the items of dispute and to be resolved at the end of the Commission's review, not at the beginning.

C.2. Do not adopt a policy of 'rebuttable Presumption' regarding RF exposure levels for workers (or for the general public).

When a state or local jurisdiction makes or enforces a regulation requiring monitoring or measuring be made to evaluate a worker RF health and safety program, there should be no Commission policy of "Rebuttable Presumption," and the Commission needs to change its general policy on this matter. The same policy should apply to general public protection from RF health and safety effects. The reasons for this are:

(1) It appears there is a history of Commission licensees sometimes having difficulties demonstrating compliance and properly correctly reporting information to governmental agencies, as was determinded by the California Public Utilities Commission (Cal. PUC) which issued fines of over $4 million regarding compliance matters.[6] This includes a California Public Utilities Commission interim report[7] which documents what appeared to be non-compliance of 16 differenent cellular phone companies in a number of counties throughout California, and including 148 apparent violations noted in this interim report, for which it was asserted that conflicting or inaccurate information was given to one or more government agencies. [See summary on pages 5 through 10 in attached Exhibit.]. One outcome of the investigation was an announcenment in the Los Angeles Times by one cellular phone company in which a statement includes that it,

"apologizes for any inconvenience its failure to comply fully may have caused the public authorities."[Los Angeles Times, April 16, 1995, page A14, see exhibits][8].

While it is hoped that matters have improved, the fact that conflicting or inaccurate information appeared to have been given by a number of companies to one or more government agencies, is prima facie evidence why the Commission should not adopt a policy of rebuttable presumption of compliance - as one should not assume compliance if past experience indicates there are sometimes apparent patterns which do not justify assuming compliance.

(2) The Commission's rules for excluding an evaluation are inadequate and may allow out-of-compliance conditions due to (i) tall buildings near 35 foot high or higher transmitters on towers or other non-occupied structures [see 47 CFR section 1.1307], and due to (ii) multiple tranmitters each owned by different operators and where each transmitter is 'just under the limit' for requiring an evaluation [see FCC 97-303, para. #76]; communications workers installing, maintaining, or repairing in the area of such multiple transmitters or high height transmitters may be especially at risk to out-of-compliance exposures while yet no routine evaluation is required under the Commission's present rules.

(3) The record indicates operators themselves will not be able to identify sources of multiple transmitters. In this regard the Commission must establish a means whereby any party can find a listing of the location of all individual Commission licensed transmitters. For example, U.S. West, Inc., in its Petition for Reconsideration of the Commission's Report and Order in ET Docket 93-62, in FCC 96-326, [at page 7] noted, "Localities increasingly are requiring acceptance of collocation arrangements as a condition of zoning authority," and also state, "Furthermore, any incumbent already complying with RF exposure standards should be entitled to expect newcomers to hold it harmless and bear costs of preventing or remedying whatever excessive RF emissions their operations would cause." Such statements seem to indicate that in environment of co-location, there is a real risk of cummulative exposures exceeding limits. By the Commission's defining a 'facility' as only the transmitters at a site owned and operated by one entity, then clearly if all the co-located transmitters/facilities from different entities are just under the limit for requiring an evaluation, then no evaluations will be done, but limits can be exceeded. Hence, there is no reason to presume the cummulative exposure at a site with co-located 'facilities' is in compliance.

(4) In addition, and in any case, the Commission must establish an inspection program, like many other regulatory federal agencies so it can evaluate to what extent its assumption of compliance is correct. Indeed, many federal agencies do not formulate policy based upon a 'rebuttable presumption of compliance -e.g. IRS, Dep. of Agriculture meat inspectors, Dept. of Treasury bank inspectors - whole Savings bank fiasco costing the tax payer billions was due to

too much relying on compliance, Nuclear Regulatory Commission, HUD found out dangers of not checking

(5) The Ad-Hoc Association is not aware that the Commission has evaluated its presumption regarding the examples. If the Commission believes it should pursue this approach, then it should cite studies showing that its past assumptions have been correct, e.g. that AM radio stations SAR levels are not exceeded for AM workers.

(6) To rebut, parties need to know where transmitters are, their height, and power output. Local jurisdictions may not be able to afford to maintain these records. The Commission must develop a system so this information is readily available and in a form where maximum power at a site from all nearby sources can be determined..

(7) It is too strict a standard to require a concerned party to make a *"prima facie' case for non compliance,"* and to bear the *"initial burden of proof and would be required to demonstrate that a particular facility does not in fact comply."* This is because states or local jurisdictions often lack the knowlege, technical expertise or equipment, and do not have readily available all of the information needed to meet the test of the Commission. Also, the Commission does not give clear guidance in its Bulletin 65 for determining exposure inside buildings. For example a study by the National Telcommunications and Information Administration (NTIA), reported that for locations in rooms with just one wall between a 900 MHz transmitter and the receiver, that 30% of the measurements were ***greater*** inside a residence than outside [see NTIA Report 94-306, Figure 21, page 30, May 1994], mostly due to reflections and curvature of signals around corners. Indeed, the Ad-Hoc Association in its Petition For Reconsideration of the Rule and Order in Et-Docket 93-62, in FCC 96-326, provided documentation from a peer-reviewed published study by O.P. Gandhi, an expert in dosimetry, and whom the Commission named as among those using appropriate scientific techniques [FCC 96-326 at para. #70]; he reports that due to reflections off electrically reflective corners (like aluminum siding on a house), that power denisty can increase 16 fold or more above that due only to the direct signal and reflections from ground. [see Ad-Hoc FCC 96-326 petition at page 7, item 10, footnote 46 therein][9]. Moreover, to show "conclusive proof" of out of compliance, the

Commission may require, not predictions, but actual measurement; however, 'worst case' maximum levels occur when there is the greatest moisture in the air, as when there is a heavy rain; because water absorbs and thus attenuates the RF signal high power must be used to reach the edge of a service area - but who takes measurements in the rain? Therefore, it may be very difficult to "prove" out-of-compliance unless the Commission's procedures allow as proof 'worst case' perdictions, including exposure due to corner reflections - as noted above, and as not mentioned in OET Bulletin 65.

Furthermore, OET Bulletin 65 is inconsistent with the conclusions of the Commission regarding computing 'worst case' conditions. The Commission notes that,

"As pointed out by the Ad-Hoc Association, in some circumstances multiple antennas may be used on the same tower by the same transmitting facility, and even though the radiation center might be more than 10 meters above ground, the lowest antenna could be near enough to ground to cause excessive RF electromagnetic fields. While we do not think such situations are very common today in the services for which we based our categorical exclusion on height to the antenna radiation center, this may not always be the case in the future. Accordingly, we are amending the categorical exclusions that are currently based on the height of the antenna radiation center above ground so that they will be based, instead, on the height of the lowest point of the antenna above ground." [FCC 97-303, para. 47].

However, in the OET Bulletin 65 section 2, Prediction Methods, all formulas, examples, and figures for predicting exposure appear to be based upon "radiation center." Therefore, the 'low height' antenna situation for which the Commission changed its rules for exclusion from a routine evaluation, still could result in a OK, 'in compliance' result based upon following OET Bulletin 65 of basing predictions on the 'radiation center', when in fact there is an out-of-compliance condition. The Ad-Hoc Association is continuing to review OET Bulletin 65, so the above examples may not exhaust the under-estimating of exposure that can occur if OET Bulletin 65 is relied upon - for these reasons it should not be relied upon. These examples indicate that even with the recognized expertise of the Commission, still significant oversights are possible, and since the Commission has adopted the correct policy of acting "out of an abundance of caution" [FCC 96-326, para. 92], it therefore should recognize that its methods may overlook key considerations, and so recognize the importance and the reasonableness of states and local

jurisdictions adopting even more stringent prediction methodology than the Commission when there is a science based approach supporing a more stringent methodology.

For the above reasons there should be no policy of rebutable presumption required of states or local jurisidictions who seek to enforce protection of the general public or of workers, and who require measurements, and who use worst case predictions, even for 'facilities' the Commission finds do not need a routine evaluation.

C.2.2 Demonstrating Compliance with requirements to protect health and safety of workers

The Commission's guidelines define a level of exposure appropriate for workers who are *"fully aware of the potential for exposure and who are in control of their exposure."* [Note 1 to Table 1 in 47 CFR Section 1.1310].

C.2.2.1 The definition of *"in control"* should include the elements of an RF health and safety program listed in the Occupational Safety and Health Administration (OSHA) letter to the FCC dated March 1, 1994 (and sometimes referred to as dated February 22, 1994), in ET-Docket 93-62. The Commission has stated, *"If such a policy* (on work place practices and procedures) *were to be instituted by the Federal Government it would seem more appropriate for OSHA itself to promulgaute this type of rule."* [FCC 96-326, para. #33] By way of the above 1994 letter to the Commission and in the public record OSHA has prumulgated its policy and has given guidance. In this above 1994 letter OSHA stated,

"The FCC require its applicants to implement a written RF protection program which appropriately addresses traditional safety and health program elements including training, medical monitoring, protective procedures and engineering controls, signs, hazard assessments, employee involvement, and designated responsibilities for program implementation."

Therefore, in accordance with the understanding of the Commission that it is appropriate for OSHA to provide a policy to guide what are appropriate work place practices to indicate what is needed for workers to be *"fully aware of the potential for exposure and who are in control of their exposure,"* as part of measuring compliance, the OSHA RF health and safety program elements listed above in the OSHA 1994 letter are appropriate to measure in order to evaluate compliance that workers are *"fully aware of the potential for exposure and who are in control of their exposure."*

In addition, in accordance with the Commission finding that it is appropriate for OSHA to promulgate the policies that can specify the "workplace practices and procedures" that would define what is required for workers to be *"fully aware of the potential for exposure and who are in control of their exposure,"* the additional OSHA requirement should be met that the effect of such an RF health and safety program should be that persons exposed above the general public/uncontrolled environment *"would be protected by a program designed to mitigate any potential increase in risk."* [OSHA letter of 1994 noted above]. Therefore, the above RF health and safety program elements can be evaluated and 'measured' according to the extent their impact is *"to mitigate potential increase in risk.'*

C.2.2.2 Accordingly, states and local jurisdictions can develop survey or use other means to measure the extent to which the OSHA RF health and safety elements are in operation and effective for workers, whether employed or provide service to operators under contract. Of course, Federal regulations allowing access to employee exposure and medical records information shall apply, e.g. 29 CFR Section 1910.1020, "Access to employee exposure and medical records," and shall include provisions in 29 CFR 1910.1020(c)(3) allowing 'designated representatives' access to such records.

Furthermore, states and local jurisdictions may require operators to use what these jurisdictions find to be appropriate procedures to evaluate exposure *"so long as they are based on generally accepted scientific methods,"* [FCC 97-303, para. 102] and are what a court of competent jurisdiction would find reasonable and within the requirements of 47 U.S.C. Section 332(c)(7)(B). For example, OET Bulletin 65 edition 97-01 reports that one can estimate the internal rate at which RF energy is being absorbed (the Specific Absorption Rate, "SAR") by using formulas developed in studies by the Commission and the Environmental Protection Agency (EPA)

"that allow a correlation to be made between the power fed ino an AM antenna and the potential current that will be induced in the body of a person climbing the antenna. This current can be correlated with the appropriate limit on whole-body absorpton specified by the FCC's guidelines and thereby anc be used as a guideline for the appropriate power reduction that an AM station must undertake when a person is on a tower." [OET Bulletin 65, edition 97-01, page 59]

Therefore states and local jurisdictions can make those regulations that will allow monitoring to evaluate whether the above actions that the AM station "must undertake" occur.

Thus, states and local jurisdictions may require using prediction methods that are equal to or more stringent than that provided in OET Bulletin 65 or its Supplement A.

C.3. State and local jurisdiction regulations to establish workplace practices and procedures to implement the worker radiofrequency ("RF") health and safety program elements to mitigate any increase in potential risk due to higher worker exposure, and which elements the Occupational Health and Safety Administration ("OSHA") told the Commission should be required[1], and regulations to monitor and otherwise measure the implementation and effectiveness of such program elements, are beyond the jurisdiction of the Commission to review and potentially to preempt because:

C.3.1 The Commission has determined that, *"Our NEPA responsibilities do not appear to encompass issuance of specific rules on workplace practices and procedures,"* and thus, *"is beyond the scope of our jurisdiction,"* [FCC 96-326, para. 33].

C.3.2 The Occupational Health and Safety Administration ("OSHA") had emphasized the exposure limit elements proposed by the Commission should be adopted as an improvement of the Commissions RF guidelines only if these limit elements existed within the context of *"a comprehensive RF protection program, and part of an employer's overall all safety and health program."*[2]; and by the Commission issuing its guidelines it has accepted that it is appropriate that the above OSHA conditions be met. Accordingly, it is appropriate for states and local jurisdictions to regulate and monitor such programs which would thus not be subject to Commission preemption (also per #3.1 above).

C.3.3 It is under the jurisdiction of courts of competent juridiction and not the Commission to settle disputes arising over state or local jurisdiction regulations to determine if Commission licensee's are complying with Commission radiofrequency (RF) exposure guidelines, e.g. as given in 47 CFR section 1.1310 (external power density exposure limits) and section 2.1093 (internal rates of absorption of RF energy), which pertain to power density and specific absorption rate limits respectively. This is the view of the Commission's Local and State Government Advisory

Committee in its Recommendation #5 of June 27, 1997. This finding that the Commission should refrain from further attempts to preempt state and local regulations is also supported by a resolution of the 65th Annual Conference of Mayors in San Francisco, California June 20-24, 1997 where it resoleved that it *"Opposes the actions of the FCC which are designed to limit, remove, or in any way alter the authority of local governments to make decisions regarding the placement, construction, and modification of personal wireless service facilities, including monopoles and towers.*

C.3.4. Information pertaining to the health and safety impacts of RF emissions from any existing or proposed Commission licensed facility are relevant to actions that states and local jurisdictions may need to take to *"protect the public safety and welfare"* as provided for in **47 U.S.C. section 253(b)**. Indeed, Section 253(b) states:

"Nothing in this section affects the authority of a State or local government to impose, on a competitively neutral basis and consistent with section 254 (Universal Service), requirements necessary to preserve and advance universal service, **protect the public safety and welfare**, ..."

Thus, any reliance on Section 253 and preemption authority given in 253(d) to the Commission shall have no impact on the ability of states and local governments to require the providing of information and giving of testimony they find to be necessary to "protect the public safety and welfare" since such requirements may not be preeempted by the Commission.

These actions are not only limited to approving a permit or zoning for a personal wireless service facility, but also pertain to building code matters relating to attenuating signals and informing persons, including the public and workers, of potential exposure dangers. That such potential danges exist is documented in the letters from the federal health agencies[3], and examples are given by the Environmental Protection Agency which has reported biological effects with potentially adverse outcomes below the hazard threshold of the Commission, for example, see the EPA report, Biological Effects of Radiofrequency Radiation, EPA-600/8-83-026F, September,1984 Also note, the Food and Drug Administration (FDA) warned the Commission that its guidelines *"do not address the indirect, but potentially harmful effects of electromagnetic*

interference with medical devices. These effects can induce failures in medical devices that can cause injury or death." [FDA to FCC letter of July 17, 1996, ET Docket 93-62]. Therefore, in order to help prevent injury or death due to the Commission's allowed exposure levels, it is necessary for states and local jurisdictions to meet their responsibilities by assessing the nature and extent of RF exposure and then to inform those potentially at risk to injury or death so appropriate precautions can be taken. Thus, independent of approval of a permit, at hearings and zoning meetings presentation of health and safety issues is relevant and necessary for being informed of potential hazards which a given land use request may cause and planning appropriate mitigation actions. **This applies to both public places and exposure in the workplace.** In addition, for the Commission to prevent such presentation of information would also violate constitutional guarantees of freedom of speech and due process.

C.3.5 The general authority of section 253(b) for states to regulate to protect the public safety and welfare extends to regulations of personal wireless services facilities. It should be noted that Congress specifically took note of 47 U.S.C section 332 pertaining to mobile services, and decided that while 47 U.S.C. section 253(e) provides that *"nothing in this section (section 253) shall affect the application of section 332(c)(3) to commercial mobile services,"* Congress also decided that there would be no no similar provision for 47 U.S.C. section 332(c)(7) where certain preemption authority is given to the Commission regarding the placement, construction, and modification of personal wireless service facilities. Since there is no provision whatsoever in this section that explicitly indicates the Commission has authority to preempt state jurisdiction of "public health and welfare" and since Section 253(b) provides for such state authority, which the Commission may not preempt, any preemption authority of the Commission in 47 U.S.C section 332(c)(7) does not pertain to state "public health and welfare" regulations.

C.3.6. The Commission may only preempt state and local jurisdiction regulations of personal wireless service facilities established "on the basis of the environmental effects of radiofrequency emissions" when the regulations are within the area over which the Commission has jurisdiction, and this excludes being able to preempt state and local jurisdiction regulations explicitly established to protect public health, safety, and welfare. For example, in #3.1 above the

Commission acknowledged it did not have jurisdiction to establish workplace practices and procedures appropriate for RF health and safety programs - and accordingly, it is shown above that therefore the Commission does not have authority to preempt either state regulations establishing such programs or monitoring or otherwise obtaining measurement to evaluate such programs. Congress also expressed this intent in 47 U.S.C. section 253(b) as noted in #3.5 above.

C.3.7 The finding in #3.6 is further supported by noting a description of the purposes and functions of the Commission, as given in 47 U.S.C. section 153 and 154 do not indicate any explicit responsibility for setting health and safety regulations - including those for the general public or for workers.

C.3.8 Two recent court decisions since passage of the Telecommunications Act of 1996 ("TCA") [Public Law 104-104, February 8, 1996], (but based upon events prior to TCA and not considering TCA in their decisions) have found that,

"the FCC does not have the responsibility for public safety with regard to cellular telephones as its responsibilities lie in regulating frequency standards...Therefore the FCC cannot preempt a state's power in the instant case (pertaining to whether cellular phones should have warning labels)"[4,5](by way of referencing #4).

In a recent landmark case in the 1st District Appellate Court of Illinois it was determined for a case heard in March 1996 and modified in November 1996, both dates after the TCA of 1996 went into effect, that,

"The FCC [Federal Communications Commission] regulates the frequency, channel spacing, and power limitations for cellular telephone use. The FCC also regulates who may provide cellular telephone services and how these service providers must structure their businesses. Therefore, the FCC does not have the responsibility for public safety with regard to cellular telephones as its responsibilities lie in regulating frequency standards. Accordingly, since Congress has not empowered the FCC to regulate cellular telephones with regard to health effects and public safety, it has not regulated so pervasively as to preclude state action on that subject. Therefore, FCC regulations cannot preempt a state's power on the issue in the instant case, i.e. whether cellular telephones are unsafe and pose an increased health risk to plaintiffs."

"We find, however, that the Food and Drug Administration (FDA) does preempt a state's power over the issues in the case at bar because the FDA directly regulates electronic products

that emit radiation with regard to public health. Specifically, the Electronic Product Radiation Control Act."[Verb v. Motorola, Inc.. 672 N.E.2nd 1287 (Ill.App. 1 Dist. 1996)

From the above it is seen that while the FCC has set power limits on, in the above case, cellular phone transmitters, FCC rules do not have preemption authority over a state's explicitly health and safety regulations, since the FCC was never authorized to issue explicitly health and safety rules - at least for the events pertaining to this case which were before the implementation of the Telecommunications Act of 1996, Public Law 104-104 ("TCA").

Likewise, recently on May 7, 1997 a Illinois county circuit court applied Verb v. Motorola and noted,

"Defendant's [Motorola, Inc.; NEC America, Inc; and Cellular Telecommunications Industry Association, and Ronald Nessen ("CTIA")] reply brief appears to argue that, although there is no FDA safety standard, there are standards set by the FCC and the American National Safety (sic, better should be 'Standards') Institute regarding the output allowed for cellular phones. This argument is irrelevant, as the FCC is empowered to regulate frequencies and power of telecommunications items. 'Congress has not empowered the FCC to regulate cellular telephones with regard to health effects and public safety (and cited Verb v. Motorola)." [Debra K. Wright vs. Motorola Inc., et al, Circuit Court of Cook County, Illinois, County Department, Law Division, Judge Paddy McNamara, Circuit Court -236, May 7, 1997]

The Commission should note that the above reference to "telecommunications items" includes personal wireless services facilities. Thus Wright v. Motorola above would also find that preemption of bona fide health and safety regulation of personal wireless services base station facilities is also not preempted by the Commissions rules.

The same logic applies to RF exposure standards to protect the public health and safety. As noted in Verb v. Motorola, Inc and in Wright v. Motorola, Congress has not given any authority to the Commission to explicitly promulgate public "health and safety" regulations. Indeed, the Commission has noted that, *"EPA* [U.S. Environmental Protection Agency] *is generally responsible for investigating and making recommendations with regard to environmental issues."* [FCC 96-326].

While EPA advised the Commission that the 1986 RF exposure criteria of the National Council For Radiation Protection and Measurements is to be preferred over the 1991 RF standard of the Institute of Electrical and Electronic Engineers (IEEE C95.1-1991), EPA itself has not promulgated a RF standard. Also EPA told the Commission that studies have observed adverse health effects, including cancer in animals, below the hazard threshold upon which the

Commission limits are derived, as noted in a letter of EPA scientist N. Hankin of October 8, 1996 to D. Fichtenberg [and attached to these comments]. Also, M. Nichols of EPA confirmed to the Commission in a January 17, 1997 letter that Mr. Hankin's comments were consistent with that of the EPA Administrator and parties who thought otherwise had "incorrectly misconstrued" Mr. Hankin's comments. Perhaps, it is the observation of these adverse effects at low levels of exposure that has made it difficult for EPA to establish an RF standard; in any case, there is no RF standard promulgated by the EPA. Likewise, the Food and Drug Administration has reported to the Commission, "the current state of scientific knowledge does not enable us to offer a specific alternative to the exposure levels in the new standard [proposed by the Commission and with limits almost identical to that selected by the Commission], we do not believe this standard addresses the issue of long term, chronic exposures to RF fields. [letter to the Commission from L. Gill of FDA, Nov. 17, 1993]. Therefore, neither FDA nor EPA are prepared to promulgate a RF health and safety standard addressing safe exposure levels.

Moreover, with regard to protecting the public safety, the Commission is reminded that the Food and Drug Administration has advised the Commission that,

"We would first like to point out that your proposed guidelines for evaluating the environmental effects of radio frequency do not address the indirect, but potentially harmful effects of electromagnetic interference with medical devices.. These environmental effects can induce failures in medical devices that ***can cause injury or death.***" [letter dated July 17, 1996, from E.Jacobson, Deputy Director for Science, Center for Devices and Radiological Health, to Richard Smith, Chief, Office of Engineering and Technology, Federal Communications Commission].

Indeed, as an example of how such interference can occur, the Ad-Hoc Association has reported to the Commission, that an article written by H.Bassen, of the Food and Drug Administration reported that for a certain model of an apnea (breathing cessation) monitor, it was shown, *"that this model was extremely susceptible to interference from fields produced by mobile communications base stations up to 100 meters away, and by FM radio broadcast stations over one kilometer away."* Also, Bassen commented on ventilators that,

"Ventilators are medical devices that are used to control or assist the mechanical ventilation of a patient's lungs. These devices can be used to provide acute or chronic respiratory therapy to patients in the hospital, **in their home**, ...". Further, that, ventilators could be stopped when exposed to RF fields with electric field strengths from less than 1/2 to as low as 1/9th of that considered 'safe' by the Commission. Likewise, at field strengths allowed from Commission base station transmitters, malfunction of electrically powered wheel chairs has been documented. Thus, limits allowed for by the Commission may cause death by those using apnea machines, ventilators, or wheel chairs. In addition Bassen noted that at levels allowed by the Commission persons with hearing aids are expected to have interference.
[in H.Bassen, "RF Interference of medical devices by mobile communications transmitters," in Mobile Communications Safety, ed. N.Kuster, Q.Balzano, J.Lin, published by Chapman & Hall, New York. 1997, pg. 65-94]. Also, regarding hearing aids, it was reported at a 1992 Dublin conference of COST (European cooperation in the field of science and technical research) that annoying interference to hearing aids due to cellar phone base station transmission levels of SM signals (near 900 MHz) occurred at about 1/10th of electric field levels considered 'safe' [see Ad-Hoc Association Petition of FCC 96-326 at page 16 and footnote 77].

Accordingly, the "field" has not be so pervasively occupied by federal health and safety agencies as to preclude states and local jurisdictions inacting their own RF health and safety standards, and it is clear that only considering electrical interference issues, there is sound evidence for expecting that states and local jurisdictions will need to study and implement measures to protect certain of its population from death due to medical device failure, and to protect the quality of life of its many residents using hearing aids.

With regard to 47 U.S.C. 332(c)(7)(B)(iv), while referring to environmental effects of radio frequency emissions, there is no mention whatsoever of the Commission being authorized to issue explicitly health and safety rules, as noted in Verb v. Motorola above.

Therefore, the same rationale as Verb v. Motorola applied to Commission regulations pertaining to portable phones and which found *"Congress has not empowered the FCC to regulate cellular telephones with regard to health effects and public safety,"* so to Congress has

not empowered the Commission to regulate wireless transmitter facilities "with regard to health effects and public safety."

By extension the same logic applies to the Commission lacking authority to preempt public safety, including health, regulations pertaining to protecting the general public from RF irradiation, and pertaining to worker RF health and safety programs to protect them from increased potential risks from RF irradiation - at least prior to the TCA.

C.3.9 Since passage of TCA, state and local jurisdiction regulations based upon protecting the public safety and welfare were further protected in Section 253(b) from preemption by the Commission, and no mention by Congress was made of the Commission's being able to preempt health and safety regulations was given in Commission preemption provisions over personal wireless service facilities regulations in 47 U.S.C. 332(c)(7)(B)(iv)-(v) ("Paragraph 7iv-v") - for indeed, as noted above, there is no indication by Congress in the sections indicating the purposes and functions of the Commission that it sought to give the Commissionion preemptory authority over health and safety matters - subjects about which the Commission itself says it has no expertise and for which Congress provided no expertise.

C.3.10. For the preemption authority given the Commission in Paragraph 7iv-v, the rules of statutory construction require it be interpreted so as to find the provision to be constitutional. Since Article 1 Section 8 of the Constitution requires statatues to be *"necessary and proper"* - Paragraph7iv-v would be unconstitional if it were interpreted as Congress giving preemptory authority to the Commission over public health and safety regulations when such authority was not stated in the purposes of the Commission and for which the Commission has no expertise. Accordingly, when in Paragraph 7iv-v we find preemption authority of certain state or local jurisdiction regulations established *"on the basis of the environmental effects of radio frequency emissions"* it must be understood that these are effects about which the purposes and functions of the Commission pertain - e.g. the environmental effects of RF that pertain to "regulating frequency standards"[4] that permit the efficient and effective transmission of telecommunication signals, without causing interference or other signal problems.

C3.11 There is evidence that the Commission has in fact significantly mis-understood and mis-interpreted the RF directives by the Federal health regarding what should be in the Commission's guidelines; this further supports that the constitutionally required "necessary and proper" requirement of the statute would not be met if one interpreted and implied that "environmental effects" included explicit health and safety effects. Evidence that the Commission has mis-understood or mis-interpreted Federal health agency RF directives of what should be in the Commission's standard include:

C3.11.1 Commission states with respect to its new rules on exposure limits that,

"The basis for these limits, as well as the basis for the 1982 ANSI (American National Standards Institute) limits that the Commission previously specified in our rules, is an SAR (specific absorption rate) *limit of 4 watts per kilogram."* [FCC Rule and Order 96-326, paragraph 3]

C.3.11.2 However, federal health agencies in their communications with the Commission on the matter of the Commission's radio frequency emission rules [FCC ET Docket 93-62, and FCC Rule and Order 96-326] have reported there are reports suggesting potentially adverse effects below this level, and these communications justify state and local jurisdictions seeking ways to mitigate effects and which would be compatible with federal requirements. For example,

(1) In November 9, 1993, Margo Oge, Environmental Protection Agency ("EPA") Director, Office of Radiation and Indoor Air, wrote the Commission concerning the Institute of Electrical and Electronic Engineers RF safety standard IEEE C95.1-1991 standard (adopted by the ANSI in 1992). This standard (as well as that adopted by the Commission) has a hazard threshold of an SAR of 4 watts per kilogram of body weight and claims that below its maximum permissible exposure limits *"a person may be exposed without harmful effect"* [IEEE C95.1-1991 page 10]. This claim, M.Oge wrote, is *"unwarranted because the adverse effects level in the 1992 ANSI/IEEE standard is based on a thermal effect."* [page 3 of M. Oge letter in Commission ET Docket 93-62]. Yet, the Commission ignored the advice of EPA and chose to make IEEE C95.1-1991 effective in its entirety from August 1996 at least through August 1997 for Part 24 Personal Communication Services. In the Comments included with the M.Oge letter is the